TO: Office of Science and Technology Policy publicaccess@ostp.gov

FROM: American Library Association and the Association of College and Research Libraries
RE: Recommendations on Public Access to Peer-Reviewed Scholarly Publications Resulting

From Federally Funded Research

DATE: Wednesday, December 21, 2011

The American Library Association (ALA) and the Association of College and Research Libraries (ACRL) write in response to the request for information issued November 3, 2011, by the Office of Science and Technology Policy (OSTP) regarding recommendations on approaches for ensuring long-term stewardship and broad public access to the peer-reviewed scholarly publications that result from federally funded scientific research. ALA is a nonprofit professional organization of more than 63,000 librarians, library trustees, and other friends of libraries dedicated to providing and improving library services and promoting the public interest in a free and open information society. ACRL, the largest division of ALA, is dedicated to enhancing the ability of academic library and information professionals to serve the information needs of the higher education community and to improving learning, teaching, and research. Both ALA and ACRL publish scholarly, peer-reviewed journals in the field of library and information science.

ALA and ACRL appreciate the opportunity to comment on increasing public access to scholarly publications resulting from federally funded research. Many of our individual members and their libraries will also submit detailed comments to OSTP. ALA and ACRL have long believed that ensuring public access to the fruits of federally funded research is a logical, feasible, and widely beneficial goal. Both ALA and ACRL have endorsed "The Federal Research Public Access Act of 2009" (S. 1373) noting, "It reflects ALA policy regarding access to federal government information by providing for the long-term preservation of, and no-fee public access to, government-sponsored, taxpayer funded, published research findings."

ALA and ACRL offers the following comment to the specific questions posed in the RFI:

(1) Are there steps that agencies could take to grow existing and new markets related to the access and analysis of peer-reviewed publications that result from federally funded scientific research? How can policies for archiving publications and making them publicly accessible be used to grow the economy and improve the productivity of the scientific enterprise? What are the relative costs and benefits of such policies? What type of access to these publications is required to maximize U.S. economic growth and improve the productivity of the American scientific enterprise?

- The complete collection of articles resulting from publicly funded research should be made immediately freely accessible, so that the public can fully use them – (i.e. text mine, data mine, compute on them, create derivative works) without commercial restriction.
- For any public-access policy to be successful, there must be consistency of requirements and mandates. Institutions often have researchers who hold grants from multiple agencies concurrently; therefore, uniform requirements and procedures regarding deposit of peer- reviewed literature should be established across all funding agencies covered. Uniformity of deposit requirements will reduce the complexity and cost while at the same time increasing the rate of compliance. Based on the initial experience of low

manuscript deposit rates under a voluntary National Institutes of Health (NIH) Public Access Policy, mandatory policies are needed to ensure compliance and routine uptake of such submissions.

- (2) What specific steps can be taken to protect the intellectual property interests of publishers, scientists, Federal agencies, and other stakeholders involved with the publication and dissemination of peer-reviewed scholarly publications resulting from federally funded scientific research? Conversely, are there policies that should not be adopted with respect to public access to peer-reviewed scholarly publications so as not to undermine any intellectual property rights of publishers, scientists, Federal agencies, and other stakeholders?
  - Copyright is given by statute, under the authority granted by the United States Constitution, Article 1, clause 8, to the authors of works specifically in order to provide an incentive for further creation ("to promote the progress of science and useful art"). Public access to scholarly articles not only does not impair this incentive; it actively supports it. The rewards that scholars obtain for the journal articles (promotion, tenure, grants, etc.) all come from having a significant impact on their disciplines. Public access has been repeatedly shown to increase citation rates and, in general, improves the chances that a scientific article will find more appreciative readers, especially those who might not have had access to a particular subscription journal. Thus public access itself will enhance the value of authors' intellectual property.
- (3) What are the pros and cons of centralized and decentralized approaches to managing public access to peer-reviewed scholarly publications that result from federally funded research in terms of interoperability, search, development of analytic tools, and other scientific and commercial opportunities? Are there reasons why a Federal agency (or agencies) should maintain custody of all published content, and are there ways that the government can ensure long-term stewardship if content is distributed across multiple private sources?
  - The federal government is the appropriate entity to provide permanent stewardship of these articles, and is in a unique position to ensure that publicly funded articles are made permanently accessible, and useable. However, we feel there should not be only one single point of access. Many academic libraries are ready to assist the management of these publications by having them deposited in their institutional repositories that they manage on behalf of researchers.
  - The authorized repositories should provide support for converting the file to a standard mark-up language, such as the currently preferred XML, if the file is not submitted in that format. PDF, a document format in ubiquitous use, does not support robust searching, linking, text-mining, or reformatting over the long-term, nor does it provide full accessibility for the blind and reading impaired. Standardization of format across the board is a key element to long-term public access. The options for submission format should follow the conventions of the disciplines from which the papers come, and not create an undue burden for the authors or publishers.
- (4) Are there models or new ideas for public-private partnerships that take advantage of existing publisher archives and encourage innovation in accessibility and interoperability, while ensuring long-term stewardship of the results of federally funded research?

- Public/private partnerships should be encouraged provided repositories meet conditions for public accessibility, use rights, interoperability and long-term preservation of publicly funded articles. Under no condition should any single site be the single point of access for these articles.
- ACRL is well-suited to assist our libraries and campuses again by sharing best practices, promulgating model publication agreements, and providing education about the rapidly changing scholarly publishing environment in which these policies fit. ALA will continue its mission to assist our patrons in accessing such critical federally funded information that would be made available.
- The NIH public access policy for federally research has proven to be a good model. However, further mandates should reduce the allowable embargo period for public access to research articles and take steps to enhance the ability of users to reuse the material they find in the repositories
- (5) What steps can be taken by Federal agencies, publishers, and/or scholarly and professional societies to encourage interoperable search, discovery, and analysis capacity across disciplines and archives? What are the minimum core metadata for scholarly publications that must be made available to the public to allow such capabilities? How should Federal agencies make certain that such minimum core metadata associated with peer-reviewed publications resulting from federally funded scientific research are publicly available to ensure that these publications can be easily found and linked to Federal science funding?
  - Making these works openly available and free for reuse is the first fundamental step to encouraging these goals. Metadata associated with these articles should be viewed as a means for enabling specific actions, rather than simply an item description and should facilitate use, reuse, and analysis of published works. Further, it should be machine-readable and machineinteroperable. Metadata should support the proper context for published resources, i.e., controlled vocabulary, attribution for funding organizations, grant IDs, and provide descriptions of relationships between entities (such as existing means such as RDF and OWL enable).

(6) How can Federal agencies that fund science maximize the benefit of public access policies to U.S. taxpayers, and their investment in the peer-reviewed literature, while minimizing burden and costs for stakeholders, including awardee institutions, scientists, publishers, Federal agencies, and libraries?

- Effective implementation strategies for public-access policies can help
  maximize returns to taxpayers by ensuring that complete results are widely
  available in a timely manner. Policies should take advantage of existing
  protocols to facilitate automatic deposit of manuscripts to multiple repositories
  (i.e., SWORD).
- Policies should encourage development of additional tools/ services, such as integrating articles with grants management systems (internal and external) or improving agency accountability.
- The NIH has implemented an agency-funded model for public access that has
  proven to be very cost-effective. The benefits in terms of faster research,
  improved innovation, greater government accountability and opportunities for
  cost-effective commercialization easily outweigh the smalls costs associated

## with managing a repository

- (7) Besides scholarly journal articles, should other types of peer-reviewed publications resulting from federally funded research, such as book chapters and conference proceedings, be covered by these public access policies?
  - The core of a public access policy should clearly be peer-reviewed journal articles, since this is a medium for which there are clear standards and expectations, whose use is familiar to most people, and for which the intellectual property rights situation is well-understood. Authors of these papers do not typically depend on royalty payments an incentive, so participation by the funded researchers will be less problematic in this area than those in which commercial expectations are paramount.
  - Other types of materials will have different conditions, and the intellectual property (IP) rights can get very complicated in some cases. Educational objects digital objects created to teach a particular concept or point would be another type of material to consider, however the standards of peer-review are not yet clearly in place for those works, and the IP rights can be very unclear. So while these educational objects, if funded by federal research money, might well be the subject of a separate mandate crafted for the specific conditions, it is clear that journal articles should be the starting point. The complexity of other materials should not be allowed to delay the implementation of a mandate for public access to funded articles across federal agencies.
- (8) What is the appropriate embargo period after publication before the public is granted free access to the full content of peer-reviewed scholarly publications resulting from federally funded research? Please describe the empirical basis for the recommended embargo period. Analyses that weigh public and private benefits and account for external market factors, such as competition, price changes, library budgets, and other factors, will be particularly useful. Are there evidence-based arguments that can be made that the delay period should be different for specific disciplines or types of publications?
  - Immediate access is the ideal time to optimize scientific and commercial utility of information contained in these articles. We urge a short embargo period and recommend a 6-month maximum to bring U.S. policy into alignment with policies already in place in Canada, the United Kingdom, and the European Union. However, to accommodate those journal publishers who continue to rely on subscription income, an author-determined embargo period of 0-12 months has proven effective across multiple disciplines.

ALA and ACRL would like to bring the following studies to the attention of the Office for Science and Technology Policy as it considers the most effective implementation of public access policies:

"Of Mice and Academics: Examining the Effect of Openness on Innovation." Fiona Murray, Philippe Aghion, Mathias Dewatripont, Julian Kolev, Scott Stern NBER Working Paper No. 14819, issued in March 2009 http://www.nber.org/papers/w14819

<sup>&</sup>quot;Climbing Atop the Shoulders of Giants: The Impact of Institutions on Cumulative Research."

Jeffrey L. Furman, Scott Stern NBER Working Paper No. 12523, issued in September 2006 http://www.nber.org/papers/w12523.pdf

"Economic and Social Returns on Investment in Open Archiving Publicly Funded Research Outputs — Report to SPARC."

John Houghton, Bruce Rasmussen, and Peter Sheehan http://www.arl.org/sparc/bm~doc/vufrpaa.pdf

"Economic implications of alternative scholarly publishing models: Exploring the costs and benefits."

JISC EI-ASPM Project, a report to the Joint Information Systems Committee
John Houghton, Bruce Rasmussen and Peter Sheehan, Charles Oppenheim, Anne Morris, Claire
Creaser, Helen Greenwood, Mark Summers and Adrian Gourlay
http://www.cfses.com/documents/2009 CSES JISC Final %20Report.pdf

Statement by David J. Lipman, M.D. Director, National Center for Biotechnology Information, National Library of Medicine, National Institutes of Health

U.S. Department of Health and Human Services:

"On Public Access to Federally-Funded Research before Committee on Oversight and Governmental Reform Subcommittee on Information Policy, Census and National Archives United States House of Representatives"

http://www.hhs.gov/asl/testify/2010/07/t20100729c.html